CHEMICAL WASTE MANAGEMENT, INC.
A WASTE MANAGEMENT COMPANY

Kettleman Hills Facility
P.O. Box 471
Kettleman City, CA 93239-0471

June 8, 2000

CERTIFIED MAIL 7099 3400 0008 2880 6928

Elaine Eby
Office of Solid Waste (5302 W)
United States Environmental Protection Agency
401 M Street SW.
Washington, D.C. 20460

Re: Chemical Waste Management, Inc., Kettleman Hills Facility – Selenium Variance Annual Report (FRL-6346-2)

Dear Ms. Eby:

Pursuant to the requirements of the site-specific treatment variance FRL-6346-2, Chemical Waste Management, Inc., Kettleman Hills Facility (KHF) is submitting this annual report. The annual report must contain information regarding any alternative treatment technologies being investigated, and provide any analytical data from these studies. The report is also to include the stabilization recipes being used to meet the alternative treatment standards, the selenium concentrations in untreated wastes, and the analytical results from these treated wastes.

Alternative Treatment Technologies

This waste does not contain sufficient organics to qualify as a candidate for incineration. The Kettleman Hills Facility has continued to discuss with vendors the availability of new products that may prove effective in treating selenium. In the past year there have been no potential products identified by the Kettleman Hills Facility for testing. At this time there have been no studies conducted using alternative products, or technologies, for the treatment of selenium.

Stabilization Recipes and Analytical Data

The attached table lists all the selenium waste from Owens Brockway and Ball Foster Glass that have been treated since the issuance of the variance. The table lists the manifest number for each load, as well as the untreated and treated selenium concentrations. The table also lists the stabilization recipe utilized to achieve the approved selenium treatment standards detailed in the variance. In some cases KHF was

able to achieve selenium concentrations below the current Phase IV treatment standard (5.7 mg/l). The raw analytical data is available upon request.

If you have any questions regarding the contents of this annual report please contact me at (559) 386-6269.

Sincerely,

Jim Sook, CHMM
Technical Manager
CHEMICAL WASTE MANAGEMENT, INC.

cc: Bill Viele, DTSC
Shelton Grey, RWQCB

bcc: Paul Turek, KHF
Bob Henry, KHF

Selenium Variance Treatment Results

Date Received	Generator	Manifest #	Stabilization Recipe	Selenium Untreated	Selenium Treated	Variance Standard
06/12/97	Owens Brockway	96222928	1.0 F; 1.0 C; 0.6 CKD	386 mg/l	11.4 mg/l	51mg/l
06/17/97	Owens Brockway	96222929	1.2 F; 1.2 C; 1.0 CKD	649 mg/l	22.3 mg/l	51mg/l
06/20/97	Owens Brockway	96222930	1.2 F; 1.6 C	540 mg/l	11.7 mg/l	51mg/l
09/18/97	Owens Brockway	96222934	0.5 F; 0.8 C; 0.8 CKD	239 mg/l	20.8 mg/l	51mg/l
10/13/97	Owens Brockway	96222936	0.4 F; 0.8 C; 0.8 CKD	274 mg/l	32.6 mg/l	51mg/l
12/31/97	Owens Brockway	96810056	1.2 F; 1.0 C; 1.0 CKD	305 mg/l	1.65 mg/l	51mg/l
01/23/98	Owens Brockway	96810057	0.4 F; 0.8 C; 0.8 CKD	162 mg/l	12.8 mg/l	51mg/l
01/30/98	Owens Brockway	96810058	0.4 F; 0.8 C; 0.8 CKD	221 mg/l	24.8 mg/l	51mg/l
03/27/98	Owens Brockway	96810059	0.6 F; 0.8 C; 1.0 CKD	483 mg/l	4.5 mg/l	51mg/l
07/13/98	Owens Brockway	96810062	0.8 F; 1.0 C; 0.4 CKD	503 mg/l	4.77 mg/l	51mg/l
04/22/98	Ball Foster	97214259	0.3 F; 0.3 C; 0.2 CKD	43.9 mg/l	14.6 mg/l	25 mg/l
04/22/98	Ball Foster	92896534	0.25 F; 0.4 C; 0.2 CKD	33.5 mg/l	13.8 mg/l	25 mg/l
11/03/98	Ball Foster	92896535	0.3 F; 0.3 C; 0.2 CKD	41.7 mg/l	8.58 mg/l	25 mg/l
10/12/99	Ball Foster	99551454	0.5 F; 0.8 C; 0.6 CKD	36.6 mg/l	6.07 mg/l	25 mg/l
04/03/00	Ball Foster	20047543	0.15 F; 0.2 C; 0.9 CKD	***	1.6 mg/l	25 mg/l

Key:
F = Ferrous Sulfate
C = Portland Cement
CKD = Cement Kiln Dust

***Load was received as a liquid vs solid discrepancy. Due to the free liquids the load could not be stored and it was immediately processed. A sample for the raw selenium analysis (TCLP) was not obtained. The treated load meets the Phase IV standards.